AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application.

1.(Currently Amended) A method to operate a digital signal receiver, comprising:

detecting ~~the~~ occurrence of a symbol degrading event for a received signal, wherein the symbol degrading event occurs after transmission and before reception of the received signal;

~~determining which symbols have been degraded by the symbol degrading event;~~

inserting zero symbols into a received symbol stream to replace symbols ~~that have been determined to have been~~ degraded by the signal degrading event prior to de-interleaving the received signal; and

error correction decoding the received symbol stream having the inserted zero symbols.

2. (Original) A method as in claim 1, where error correction decoding comprises operating a Reed-Solomon decoder.

3. (Original) A method as in claim 1, where error correction decoding comprises operating a BCH decoder.

4. (Original) A method as in claim 1, where error correction decoding comprises operating a Turbo decoder.

5. (Original) A method as in claim 1, where inserting occurs in conjunction with operating a BPSK bit metric calculator.

6. (Original) A method as in claim 1, where inserting occurs after a Viterbi decoder.

7. (Original) A method as in claim 1, where error correction decoding comprises first de-interleaving the received symbol stream having the inserted zero symbols.

8. (Previously Presented) A method as in claim 1, where detecting comprises:

estimating a signal to noise ratio (SNR) of a block of L contiguous received symbols, where L is an integer greater than or equal to one;

comparing the estimated SNR to a threshold SNR value; and

replacing L symbols with L zero symbols when the estimated SNR is less than the threshold SNR.

9. (Original) A method as in claim 1, where detecting comprises examining the output of at least one Automatic Gain Control (AGC) circuit.

10. (Original) A method as in claim 9, where detecting comprises comparing the output of a slow AGC to a first threshold, comparing the output of a fast AGC to a second threshold, and replacing symbols with zero symbols when either the first or the second threshold is exceeded.

11. (Original) A method as in claim 9, where detecting comprises comparing a difference between the output of a slow AGC and the output of a fast AGC to a threshold, and replacing symbols with zero symbols when the difference exceeds the threshold.

12. (Original) A method as in claim 9, where detecting comprises comparing a difference between the output of a fast AGC and an average of the output of the fast AGC to a threshold, and replacing symbols with zero symbols when the difference exceeds the threshold.

13. (Original) A method as in claim 1, where detecting uses information received from a transmitter that is indicative of a time when a deep fade occurs.

14.(Currently Amended) A digital signal receiver, comprising:

circuitry for detecting the occurrence of a symbol degrading event for a received signal; ~~for determining which symbols comprising the signal have been degraded by the symbol degrading event;~~ and for inserting zero symbols into a received symbol stream to replace symbols ~~that have been determined to have been degraded~~ by the symbol degrading event prior to de-interleaving the received signal, wherein the symbol degrading event occurs after transmission and before reception of the received signal; and

a decoder for decoding the received symbol stream having the inserted zero symbols.

15.(Original) A digital signal receiver as in claim 14, where the decoder comprises a Reed-Solomon decoder.

16.(Original) A digital signal receiver as in claim 14, where the decoder comprises a BCH decoder.

17.(Original) A digital signal receiver as in claim 14, where the decoder comprises a Turbo decoder.

18.(Original) A digital signal receiver as in claim 14, where said circuit inserts the zero symbols in conjunction with operation of a BPSK bit metric calculator.

19.(Original) A digital signal receiver as in claim 14, where said circuit inserts the zero symbols after a Viterbi decoder.

20.(Original) A digital signal receiver as in claim 14, further comprising a de-interleaver for de-interleaving the received symbol stream having the inserted zero symbols.

21.(Previously Presented) A digital signal receiver as in claim 14, where said circuit comprises:

means for estimating a signal to noise ratio (SNR) of a block of L contiguous received symbols, where L is an integer greater than or equal to one;

means for comparing the estimated SNR to a threshold SNR value; and

means for replacing L symbols with L zero symbols when the estimated SNR is less than the threshold SNR.

22.(Original) A digital signal receiver as in claim 14, where said circuit comprises means for examining the output of at least one Automatic Gain Control (AGC) circuit.

23.(Original) A digital signal receiver as in claim 22, where said circuit comprises means for comparing the output of a slow AGC to a first threshold, means for comparing the output of a fast AGC to a second threshold, and means for replacing symbols with zero symbols when either the first or the second threshold is exceeded.

24.(Original) A digital signal receiver as in claim 22, where said circuit comprises means for comparing a difference between the output of a slow AGC and the output of a fast AGC to a threshold, and means for replacing symbols with zero symbols when the difference exceeds the threshold.

25.(Original) A digital signal receiver as in claim 22, where said circuit comprises means for comparing a difference between the output of a fast AGC and an average of the output of the fast AGC to a threshold, and means for replacing symbols with zero symbols when the difference exceeds the threshold.

26.(Original) A digital signal receiver as in claim 14, where said circuit uses information received from a transmitter that is indicative of a time when a deep fade occurs.

27.(Currently Amended) A method to receive a signal that passes through a channel that is periodically obstructed by a rotating propeller blade, comprising:

detecting ~~the~~ occurrence of a fading condition due to obstruction by the propeller blade;

in response to detecting the occurrence of the fading condition, ~~determining which symbols comprising the signal have been degraded by the fading condition;~~ inserting zero symbols into a received symbol stream at the receiver to replace symbols ~~that have been determined to have been~~ degraded by the fading condition caused by the obstructing propeller blade;

de-interleaving the received symbol stream having the inserted zero symbols; and

decoding the received symbol stream having the inserted zero symbols.

28.(Original) A method as in claim 27, where decoding comprises operating a concatenated forward error correction (FEC) decoder.

29.(Original) A method as in claim 27, where decoding comprises operating one of a Reed-Solomon decoder, a BCH decoder, or a Turbo decoder.

30.(Currently Amended) A method to operate a satellite to receive a signal that passes through a channel that is periodically obstructed by a rotating propeller blade, comprising:

detecting, on the satellite, ~~the~~ occurrence of a fading condition due to obstruction by the propeller blade;

in response to detecting the occurrence of the fading condition,

~~determining which symbols comprising the signal have been degraded by the fading condition;~~

inserting zero symbols into a received symbol stream at the satellite to replace symbols ~~that have been determined to have been~~ degraded by the fading condition caused by the obstructing propeller blade;

de-interleaving the received symbol stream having the inserted zero symbols; and

error correction decoding the received symbol stream having the inserted zero symbols.

31.(Currently Amended) A satellite, comprising a receiver for receiving a signal that passes through a channel that is periodically obstructed, the receiver comprising circuitry for detecting ~~the~~ occurrence of a fading condition due to an obstruction and, in response to detecting the occurrence of the fading condition, ~~determining which symbols comprising the signal have been degraded by the fading condition,~~ for inserting zero symbols into a received symbol stream to replace symbols ~~that have been determined to have been~~ corrupted by the fading condition caused by the periodic obstruction; and an error correction decoder for decoding the received symbol stream having the inserted zero symbols.